



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,723	05/14/2001	Michael L. Heubel	BELL-0068/00248	8659
49584	7590	04/03/2007	EXAMINER	
LEE & HAYES, PLLC 421 W. RIVERSIDE AVE. SUITE 500 SPOKANE, WA 99201			FOX, BRYAN J	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/854,723	HEUBEL ET AL.	
	Examiner	Art Unit	
	Bryan J. Fox	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 January 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2 and 5-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 31, 2007 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al. (US006377825B1) in view of Meidan et al. (US005509048A) and

further in view of Wendelrup (US 20020066115A1) and Stanley (US 20020068605A1) and Uchiyama (US 20020072390A1).

Regarding claim 1, Kennedy et al. discloses a hands-free wireless communication system with an interface module (see column 2, lines 30-32) between a wireless communication device and car (see column 1, lines 6-9) including a data port to receive data from the wireless device (see column 6, lines 27-34 and figure 3), which reads on the claimed "first data associated with a cradle for receiving the portable communications device, the first data port adapted to be coupled to the data output port of the portable communications device, the first data port for receiving...data from the portable communications device". Also, the interface may include an interface 348 for interconnecting the interface module 106 to various external subsystems 378 (see column 7, lines 60-62 and figure 3) and external subsystems 378 may include a screen for displaying textual information (see column 27, lines 47-50). Kennedy et al further discloses the interface module is activated when the pocket 104 is plugged into the interface module (see column 17, line 52 – column 18, line 3), which reads on the claimed invention that provides functionality automatically, upon placement of the portable communication device into the cradle. Kennedy further discloses the use of a serial I/O port (see column 16, lines 23-64), which reads on the claimed invention where the cradle includes an audio serial port for receiving the audio data. The external systems may further include a mic 368 and a speaker 366 (see figure 3), which reads on the claimed, "the cradle is also adapted to couple to a hands-free kit, such that when the cradle couples to the hands-free kit the hands-free kit outputs the remote audio data

Art Unit: 2617

and receives the audio data that is to be sent back through the portable communications device." Kennedy et al. fails to teach that the remote display device is a projection display device.

In a similar field of endeavor, Meidan et al. discloses the use of a projection display in conjunction with a wireless device (see column 3, lines 36-41 and figure 8). Meidan et al further disclose the use of an aural annunciator 193 as well as the visual-signal display assembly 172 (see column 4, lines 52-63), which reads on the claimed, "including...audio data and...visual data."

It would have been obvious to one skilled in the art at the time of the invention to modify Kennedy et al. with Meidan et al. to include the projection display in order to provide an easy to read display in a car. The combination of Kennedy et al. and Meidan et al. fails to expressly disclose that the information from the cellular telephone is received from a remote location and that the portable communication device comprises a processor for converting the received remote data into the representation of the remote data displayed on the remote projection display.

In a similar field of endeavor, Wendelrup discloses a mobile phone that receives video signals through the antenna and radio circuit and converts them from digital to analog signals, then modulates them to form a standard video signal so that any television receiver could accept the signals and be used as a display unit (see paragraph 35).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al and Meidan with Wendelrup to

include the above conversion of signals received for external display in order to allow for better viewing as suggested by Wendelrup (see paragraph 41) and to allow information gathering from a wide variety of sources. The combination of Kennedy et al, Meidan and Wendelrup fails to disclose a scroll controller that is adapted to cause the remote projection display device to provide a scrolling display of information, wherein the scroll controller is integrated into an automobile steering wheel and wherein the display controller being adapted to cause the remote projection display device to turn on and off the displayed information; wherein the display controller also comprises a control device that is integrated into the automobile steering wheel and is adapted to be electrically coupled to the remote projection display device.

In a similar field of endeavor, Stanley discloses an interface incorporated into a steering wheel (see figure 1) including scroll keys (see paragraph 44 and 52), which reads on the claimed, "scroll controller that is adapted to cause the remote projection display device to provide a scrolling display of information that corresponds to the scrollable display of the portable communications device; wherein the scroll controller comprises a control device that is integrated into an automobile steering wheel and is adapted to be electrically coupled to the remote projection display device." Further, control of the device may be controlled by the power key 4 (see paragraph 39 and figure 1), which reads on the claimed, "the display controller being adapted to cause the remote projection display device to turn on and off the displayed information; wherein the display controller also comprises a control device that is integrated into the

Art Unit: 2617

automobile steering wheel and is adapted to be electrically connected to the remote projection display device."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan and Wendelrup with Stanley to include the above scroll controller and display controller incorporated into a steering wheel in order to provide both an ancillary and integrated mechanical user interface for a cell phone or other wireless communications device used in a motor vehicle that enables a vehicle operator to make, field, and engage in two-way communications while maintaining a two-handed grip on the steering wheel and visual attention to the road. The combination of Kennedy et al, Meidan, Wendelrup and Stanley fails to disclose the cradle includes a speaker for outputting the remote audio data, and a microphone for receiving audio data that is to be sent back through the portable communications device.

In a similar field of endeavor, Uchiyama discloses a speaker and microphone 22 on a cradle (see e.g. figure 5).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan, Wendelrup and Stanley with Uchiyama to include the above speaker and microphone in order to allow for the advantages of a conventional cordless telephone without the disadvantages generally associated with a wireless telephone as suggested by Uchiyama (see paragraph 33).

Regarding **claims 5, 6, and 7**, the combination of Kennedy et al, Meidan et al, Wendelrup, Stanley and Uchiyama discloses that the wireless device may be any communication device capable of wireless communication (see Kennedy et al. column 1, lines 5-9).

Regarding **claim 8**, Kennedy et al fails to expressly disclose that the remote projection display device provides the projected display on an automobile windshield.

In a similar field of endeavor, Meidan et al. discloses that the screen 278 is positioned at a windshield portion of the vehicle 199 (see Meidan et al. column 6, lines 15-16 and figures 2 and 8).

It would have been obvious to one skilled in the art at the time of the invention to modify Kennedy et al. with Meidan et al. to include the projection display positioned at a windshield portion of the vehicle in order to provide an easy to read display in a car. The combination of Kennedy et al. and Meidan et al. fails to expressly disclose that the information from the cellular telephone is received from a remote location and that the portable communication device comprises a processor for converting the received remote data into the representation of the remote data displayed on the remote projection display.

In a similar field of endeavor, Wendelrup discloses a mobile phone that receives video signals through the antenna and radio circuit and converts them from digital to analog signals, then modulates them to form a standard video signal so that any television receiver could accept the signals and be used as a display unit (see paragraph 35).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al and Meidan with Wendelrup to include the above conversion of signals received for external display in order to allow for better viewing as suggested by Wendelrup (see paragraph 41) and to allow information gathering from a wide variety of sources. The combination of Kennedy et al, Meidan and Wendelrup fails to disclose a scroll controller that is adapted to cause the remote projection display device to provide a scrolling display of information, wherein the scroll controller is integrated into an automobile steering wheel.

In a similar field of endeavor, Stanley discloses an interface incorporated into a steering wheel (see figure 1) including scroll keys (see paragraph 44 and 52).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan and Wendelrup with Stanley to include the above scroll controller incorporated into a steering wheel in order to provide both an ancillary and integrated mechanical user interface for a cell phone or other wireless communications device used in a motor vehicle that enables a vehicle operator to make, field, and engage in two-way communications while maintaining a two-handed grip on the steering wheel and visual attention to the road. The combination of Kennedy et al, Meidan, Wendelrup and Stanley fails to disclose the cradle includes a speaker for outputting the remote audio data, and a microphone for receiving audio data that is to be sent back through the portable communications device.

In a similar field of endeavor, Uchiyama discloses a speaker and microphone 22 on a cradle (see e.g. figure 5).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan, Wendelrup and Stanley with Uchiyama to include the above speaker and microphone in order to allow for the advantages of a conventional cordless telephone without the disadvantages generally associated with a wireless telephone as suggested by Uchiyama (see paragraph 33).

Regarding **claim 9**, Kennedy et al fails to disclose that the remote projection display device is a heads-up display device integrated into an automobile.

In a similar field of endeavor, Meidan et al discloses that the visual signal display 172 (see Meidan et al. figure 1) comprises a heads-up display in a vehicle (see Meidan et al. column 4, lines 58-59 and figures 2 and 8).

It would have been obvious to one skilled in the art at the time of the invention to modify Kennedy et al. with Meidan et al. to include the projection display positioned at a windshield portion of the vehicle in order to provide an easy to read display in a car. The combination of Kennedy et al. and Meidan et al. fails to expressly disclose that the information from the cellular telephone is received from a remote location and that the portable communication device comprises a processor for converting the received remote data into the representation of the remote data displayed on the remote projection display.

In a similar field of endeavor, Wendelrup discloses a mobile phone that receives video signals through the antenna and radio circuit and converts them from digital to analog signals, then modulates them to form a standard video signal so that any

television receiver could accept the signals and be used as a display unit (see paragraph 35).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al and Meidan with Wendelrup to include the above conversion of signals received for external display in order to allow for better viewing as suggested by Wendelrup (see paragraph 41) and to allow information gathering from a wide variety of sources. The combination of Kennedy et al, Meidan and Wendelrup fails to disclose a scroll controller that is adapted to cause the remote projection display device to provide a scrolling display of information, wherein the scroll controller is integrated into an automobile steering wheel.

In a similar field of endeavor, Stanley discloses an interface incorporated into a steering wheel (see figure 1) including scroll keys (see paragraph 44 and 52).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan and Wendelrup with Stanley to include the above scroll controller incorporated into a steering wheel in order to provide both an ancillary and integrated mechanical user interface for a cell phone or other wireless communications device used in a motor vehicle that enables a vehicle operator to make, field, and engage in two-way communications while maintaining a two-handed grip on the steering wheel and visual attention to the road. The combination of Kennedy et al, Meidan, Wendelrup and Stanley fails to disclose the cradle includes a speaker for outputting the remote audio data, and a microphone for receiving audio data that is to be sent back through the portable communications device.

In a similar field of endeavor, Uchiyama discloses a speaker and microphone 22 on a cradle (see e.g. figure 5).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan, Wendelrup and Stanley with Uchiyama to include the above speaker and microphone in order to allow for the advantages of a conventional cordless telephone without the disadvantages generally associated with a wireless telephone as suggested by Uchiyama (see paragraph 33).

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al. in view of Meidan et al, Wendelrup, Stanley and Uchiyama, and further in view of Klausner (US006489934B1).

Regarding **claim 2**, the combination of Kennedy et al, Meidan et al, Wendelrup and Stanley fails to expressly disclose the reformatting of the display in the manner claimed.

In a similar field of endeavor, Klausner discloses a cellular phone with a built in projector display with a display controller 5 that formats the received data to provide the properly formatted data to display driver 6 for subsequent display (see column 3, lines 35-59 and figure 2), which reads on the claimed data translator that formats the data received from the portable communications device into the format from which the remote projection display device can provide the projected display.

It would have been obvious to one skilled in the art at the time of the invention to modify the combination of Kennedy et al, Meidan et al, Wendelrup and Stanley with Klausner to include the above reformatting display in order to provide the user with a more readable display of data.

Regarding **claim 10**, Kennedy et al. discloses a hands-free wireless communication system in a vehicle including a data port to receive data from the wireless device (see column 6, lines 27-34 and figure 3), the wireless device having a connector 116 that provides data to the interface (see column 6, lines 27-30), which reads on the claimed “portable communications device having an externally accessible data output port”. The interface includes a pocket 104 that holds the telephone 102 securely in place (see column 6, lines 30-31 and figure 1A), which reads on the claimed “housing that is adapted to receive the portable communication device”. The pocket also includes an electrical connector 124 that connects to the phone connector 116 described above (see column 6, lines 1-5), which reads on the claimed “interface for coupling the data output of the portable communications device to the housing”, and also the interface may include an interface 348 for interconnecting the interface module 106 to various external subsystems 378 (see column 7, lines 60-62 and figure 3) and external subsystems 378 may include a screen for displaying textual information (see column 27, lines 47-50). The system disclosed by Kennedy et al. further includes a processor 348 for communicating with the external systems 378 as can be seen in figure 3. The processor converts telephone control and other signals between the proprietary interface of the communications device and the application programming

device of the system, which reads on the claimed invention with a processor for receiving the communications data from the portable communications device and forwarding the received data to the remote projection display device via the second interface in a suitable format. Kennedy et al further discloses the interface module is activated when the pocket 104 is plugged into the interface module (see column 17, line 52 – column 18, line 3), which reads on the claimed, “sensor for detecting placement of the portable communication device into the housing,” and provides functionality automatically upon detection of placement of the portable communications device into the housing. The system disclosed by Kennedy et al. fails to teach the use of a projection display.

In a similar field of endeavor, Meidan et al. discloses the use of a projection display in conjunction with a wireless device (see column 3, lines 36-41 and figure 8). Meidan et al further disclose the use of an aural annunciator 193 as well as the visual-signal display assembly 172 (see column 4, lines 52-63), which reads on the claimed, “including...audio data and...visual data.”

It would have been obvious to one skilled in the art at the time of the invention to modify Kennedy et al. with Meidan et al. to include the projection display in order to provide an easy to read display in a car. The combination of Kennedy et al. and Meidan et al. fails to expressly disclose that the information from the cellular telephone is received from a remote location and that the portable communication device comprises a processor for converting the received remote data into the representation of the remote data displayed on the remote projection display.

In a similar field of endeavor, Wendelrup discloses a mobile phone that receives video signals through the antenna and radio circuit and converts them from digital to analog signals, then modulates them to form a standard video signal so that any television receiver could accept the signals and be used as a display unit (see paragraph 35).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al and Meidan with Wendelrup to include the above conversion of signals received for external display in order to allow for better viewing as suggested by Wendelrup (see paragraph 41) and to allow information gathering from a wide variety of sources. The combination of Kennedy et al, Meidan and Wendelrup fails to disclose a scroll controller that is adapted to cause the remote projection display device to provide a scrolling display of information, wherein the scroll controller is integrated into an automobile steering wheel and wherein the processor is configured to receive commands from a remote toggle controller, the remote toggle controller being adapted to cause the remote projection display device to toggle the display of the remote data between on and off states in response to actuation of the remote toggle controller.

In a similar field of endeavor, Stanley discloses an interface incorporated into a steering wheel (see figure 1) including scroll keys (see paragraph 44 and 52), which reads on the claimed, "scroll controller that receives scrolling commands from a remote scroll control device that is adapted to be integrated into an automobile steering wheel and adapted to cause the remote projection display device to provide a scrolling display

of the converted remote data based on the scrolling commands.” Further, control of the device may be controlled by the power key 4 (see paragraph 39 and figure 1), which reads on the claimed, “wherein the processor is configured to receive commands from a remote toggle controller, the remote toggle controller being adapted to cause the remote projection display device to toggle the display of the remote data between on and off states in response to actuation of the remote toggle controller.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan and Wendelrup with Stanley to include the above scroll controller incorporated into a steering wheel in order to provide both an ancillary and integrated mechanical user interface for a cell phone or other wireless communications device used in a motor vehicle that enables a vehicle operator to make, field, and engage in two-way communications while maintaining a two-handed grip on the steering wheel and visual attention to the road. The combination of Kennedy et al, Meidan, Wendelrup and Stanley fails to disclose the cradle includes a speaker for outputting the remote audio data, and a microphone for receiving audio data that is to be sent back through the portable communications device.

In a similar field of endeavor, Uchiyama discloses a speaker and microphone 22 on a cradle (see e.g. figure 5).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Kennedy et al, Meidan, Wendelrup and Stanley with Uchiyama to include the above speaker and microphone in order to allow

for the advantages of a conventional cordless telephone without the disadvantages generally associated with a wireless telephone as suggested by Uchiyama (see paragraph 33). The combination of Kennedy et al, Meidan et al, Wendelrup and Stanley fails to teach the data translator in the manner claimed.

In a similar field of endeavor, Klausner discloses a cellular phone with a built in projector display with a display controller 5 that formats the received data to provide the properly formatted data to display driver 6 for subsequent display (see column 3, lines 35-59 and figure 2), which reads on the claimed data translator that "formats the data received from the portable communications device into the format from which the remote projection display device can provide the projected display".

It would have been obvious to one skilled in the art at the time of the invention to modify the combination of Kennedy et al, Meidan et al, Wendelrup and Stanley with Klausner to include the above reformatting display in order to provide the user with a more readable display of data.

Response to Arguments

Applicant's arguments with respect to claims 1-2 and 5-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox
March 29, 2007



CHARLES N. APPIAH
SUPERVISORY PATENT EXAMINER